201-14394

NCIC HPV
Sent by: Mary-Beth Weaver

04/09/2003 09:37 AM

To: NCIC HPV, moran.matthew@epa.gov
cc:
cc:
Subject: Environmental Defense comments on Succinimide Dispersant Category

Richard_Denison@environmentaldefense.org on 04/08/2003 06:45:04 PM

To: oppt.ncic@epamail.epa.gov, hpv.chemrtk@epamail.epa.gov, Rtk Chem/DC/USEPA/US@EPA, Karen Boswell/DC/USEPA/US@EPA, tadams@therobertsgroup.net
cc: MTC@mchsi.com, lucierg@msn.com, rdenison@environmentaldefense.org, kflorini@environmentaldefense.org

Subject: Environmental Defense comments on Succinimide Dispersant Category

(Submitted via Internet 4/8/03 to oppt.ncic@epa.gov, hpv.chemrtk@epa.gov, boswell.karen@epa.gov, chem.rtk@epa.gov, MTC@mchsi.com, and tadams@therobertsgroup.net)

Environmental Defense appreciates this opportunity to submit comments on the robust summary/test plan for Succinimide Dispersant Category.

The American Chemistry Council Petroleum Additives Panel, through its Health Environmental, and Regulatory Task Group (HERTG), has submitted a Robust Summary/Test Plan to describe available data and testing needs for two Succinimide Dispersants, proposing that they be considered together as a category. Based on our review of this Robust Summary/Test Plan and related information, we agree that these chemicals have similar uses, structures and chemical/physical and toxicological properties. Therefore, we support their consideration as a category.

While data presented by the sponsor are limited, the Test Plan submitted for this proposed category is well written and clearly describes the synthesis, uses, possible sources of human and environmental exposure and toxicities of these chemicals. According to the Test Plan, these chemicals are actually mixtures of large molecules with molecular weight ranges from 1134 to 3160 daltons. They are synthesized in highly refined lubricating base oil and, according to the sponsor, cannot be isolated in pure form. If isolated they become undefined solids and lose their chemical/physical properties, and thus their toxicological properties would not be expected to be retained. It is stated that the parent chemicals are poorly biodegraded in the environment; however, they have very low toxicity and would be expected to partition primarily into soil and sediment where they should be slowly degraded by microorganisms.

The Test Plan clearly describes the objectives of each SIDS element required and concisely describes available data to address the respective elements. Our review of the Robust Summary indicates data describing the toxicity of these chemicals is limited, but most available studies are relatively recent and conducted under GLP. Results of these studies indicate these succinimide dispersants are not genotoxic and that they have very low toxicity to both mammals and aquatic organisms. Their low toxicity is most probably due to the fact these are very large molecules that would not be expected to be absorbed through cell membranes.

All but one of the SIDS elements have been addressed by actual, bridged or computer modeled data. The one exception, hydrolysis, has been addressed by the technical discussion, which we consider to be adequate.

Other comments:
1. A number of pages will not print and some appear to be incomplete on the version of the text posted on the EPA web site.
2. Table 8 is an important Table in the Test Plan and appears to be incomplete. It also does not print.
3. Numerous references are mentioned in the Test Plan, but are not listed in the bibliography. Many are useful references that readers may find of use. They should be included in the bibliography.
4. In the Robust Summary, CAS# 67762-72-5 is referred to as 2,5-pyrrolidinedione. Since this CAS# actually refers to a mixture of 2,5-pyrrolidinedione derivatives, would it not be more correct to refer it as 2,5-pyrrolidinedione derivatives? Also, CAS# 84605-20-9 should probably be referred to as derivatives rather than derivative.

Thank you for this opportunity to comment.

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